Portland Harbor Superfund Site Updates

Portland, Oregon January 2018

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EPA issued the Record of Decision for the Portland Harbor Superfund Site in January 2017. The Record of Decision is the cleanup plan for the approximately 10-mile stretch of the Lower Willamette River in Portland. The detailed design of the cleanup work is called the Remedial Design. Remedial Design is anticipated to take three to four years. During this period and b~~B~~efore the final cleanup is ~~designed~~implemented, baseline samples will be collected and analyzed (the "Pre-Remedial" work) to help with~~understand the~~establishing a current state of the river also known as the "baseline" condition, and to inform the final cleanup.

Pre-Remedial Design Work

On December 19, 2017, EPA signed an Administrative Settlement Agreement and Order on Consent (ASAOC) with the "Pre-RD" Group for baseline sampling at the Portland Harbor Superfund site. The Pre-RD Group is made up of four of the Potentially Responsible Parties for the site: Arkema Inc., Evraz Inc. NA, Schnitzer Steel Industries Inc., and The Marine Group LLC.

The ASAOC includes a Statement of Work and Work Plan for the sampling activities. The ASAOC, Statement of Work, Work Plan and associated tables, figures, maps, and appendices, can be found on the EPA website:

https://semspub.epa.gov/src/document/10/100077191

The documents detail the tasks the Pre-RD Group will conduct, with EPA oversight, from January 2018 through October 2019 and includes the following major activities:

Main Goals of the Agreement

- Update existing site-wide data
- Baseline data collected will be used with future long-term monitoring to evaluate trends in monitored natural recovery
- Refine sediment management areas

Pre-Remedial Design Schedule (Proposed)

Field Plans
December 2017 to March 2018

Field Sampling / Laboratory Analysis
January 2018 to June 2019

Data Analysis / Evaluation
June 2018 to April 2019

Deliverables – data, reports, and analysis
December 2018 to October 2019

Bathymetric Survey

Creating a topographic map of the riverbed – mapping the peaks and valleys of the river – will identify areas for sediment sampling, inform future dredging and capping, and provide information on riverbed slope, natural recovery, and stability.

Surface Sediment Sampling

For Portland Harbor, the surface sediment is the top 12 inches of mud at the bottom of the river. This sampling will analyze the surface sediment for contaminants such as PCBs, DDx, total PAHs, and Dioxins/Furans. The results will help establish a baseline for these contaminants as well as help refine sediment management areas.

Surface Water Sampling

Analysis of surface water samples collected at seven transects ("lines" that cross the river at specified locations), during three seasonal events, will help establish a river water contaminant baseline before cleanup.

Fish Acoustic Tracking and Tissue Sampling

Acoustic tracking will record date, time, and location of "tracked" smallmouth bass over the course of a year. This will allow us to better understand where these fish are being exposed to contamination as the remedy is implemented.

Tissue sampling will establish a pre-construction baseline of contaminants in the bodies of smallmouth bass that will allow us to evaluate the effectiveness of the cleanup over time.

Background Porewater Sampling

Determining concentrations of naturally occurring metals, such as arsenic and manganese, in the water between the grains of sediment on the riverbed will be done to differentiate what higher levels might require cleanup.

Sediment Coring

Sediment coring allows us to analyze sediment samples collected below the 12-inches of surface sediment. This information will help to refine the sediment management areas where there is limited data.

Downtown and Upriver Reaches

Additional sampling collected upstream of the Superfund site will provide more information about contaminants entering the site. This work entails:

Surface Sediment
Collect random surface sediment samples from the Downtown Reach and the Upriver Reach

Fish Tissue
Collect smallmouth bass samples.

Surface Water
Collect surface water samples at 2 transects over 3 seasonal events.

Sediment Traps
Sediment traps (glass tubes to grab sediment coming into the site) will be sampled over the course of a year.

Some Other Components of the Agreement

- If requested, the Pre-RD Group shall support Community Involvement related to the work, and consider participating in EPA's Superfund Job Training initiative
- PRPs (Potentially Responsible Parties) shall reimburse EPA up to $2 million for EPA response costs
- EPA will have the opportunity to review contractors selected by the pre-RD group to perform the field sampling work
- EPA can impose financial penalties for noncompliance
- A dispute resolution process may occur if the Pre-RD Group objects to an EPA decision or action in this agreement
- EPA can take over work from the Pre-RD Group. The Pre-RD group won't have to pay for those costs under this agreement
- Pre-RD Group shall have regular meetings with EPA
- Pre-RD Group will provide regular progress reports to EPA
- EPA will conduct site inspections or be on-site during field work

Comparison of Pre-RD and EPA Draft Sampling Designs		
Media	**Pre-Remedial Design data collection target**	**EPA Draft plan data collection target**
Surface Sediment	606 samples – 428 random, 178 non-random for SMA delineation	Different sampling pattern; fully determine SMAs
Surface Water	7 transects at three seasonal events	Fewer (5) sampling transects
Fish Tissue	95 whole body smallmouth bass samples	Also included resident species: carp, crayfish, clams; migrating species: chinook salmon, pacific lamprey, white sturgeon; Osprey eggs
Fish Tracking	Transmitters allow for tracking of date, time, and location of smallmouth bass	Acoustic tracking was not included
Background Porewater	8 locations, 3 composites per location, samples analyzed for naturally occurring arsenic and manganese	Porewater sampling was not included
Sediment Cores	90 cores, samples taken in 2 foot sections	1080 to 1470 cores, samples taken in 1 foot sections, to inform the full remedial design
Downtown / Upriver Reaches		
Surface Sediment	30 random samples in the Downtown Reach and 30 random samples in the Upriver Reach	60 samples in each reach
Fish Tissue	40 smallmouth bass samples	Also included resident species: carp, crayfish, clams; migrating species: chinook salmon, pacific lamprey, white sturgeon; Osprey eggs
Surface Water	2 transects at RM 11.8 and 16.2	
Sediment Traps	4 sediment traps sampled 3 times in one year	

Commented [SEC1]: I would not include this column showing the EPA Plan elements. 1) The details may cause confusion and 2) this is likely to cause issues with the Pre-RD Group.

Albert Kelly's direction at the end of negotiations was to put our foot in the circle and embrace the final plan as "The one and only plan" even though both parties didn't like some of the items given up during negotiations. I think adding EPA's plan details in this fact sheet for comparison purposes may be considered by some as counter to this direction.

Update on the Early Action Sites

These three sites are areas where early cleanup actions have been conducted in the most heavily contaminated areas of the river:

Gasco / Siltronic

An Administrative Order is in place for remedial design. EPA is working with the NW Natural Gas Company and the Siltronic Corporation to design a cleanup plan. Once a rough draft of the cleanup design plan is complete, EPA will provide the document for public comment and provide an information session.

For more information, contact Sean Sheldrake, EPA Project Manager for Gasco/Siltronic, sheldrake.sean@epa.gov .

River Mile 11 East

A draft Administrative Order for remedial design has been drafted and is expected to be signed soon. Once a rough draft of the cleanup design plan is complete, EPA will provide the document for public comment and provide an information session.

For more information, contact Sean Sheldrake, EPA Project Manager for River Mile 11 East, sheldrake.sean@epa.gov .

Terminal 4

EPA and the Port of Portland have been meeting to discuss implementation of the Record of Decision. Those discussions include questions the Port has about the Record of Decision and amending the existing Administrative Order so the Port can proceed with remedial design.

For more information, contact Rebecca Chu, EPA Project Manager for Terminal 4, chu.rebecca@epa.gov .

EPA's Community Involvement

We're continuing to explore a regular forum and/or roundtable concept

Community Involvement Plan

- Currently compiling information from over 50 interviews
- Draft CIP is anticipated available for community review Spring 2018

Technical Assistance Grant

- EPA received a letter of intent from the Willamette River Advocacy Group on 12/8/2017
- We plan to post a notice in the newspaper January 2018 announcing the availability of the technical assistance grant

For More Information:

- Sean Sheldrake, Remedial Project Manager, 206-553-1220, sheldrake.sean@epa.gov
- Laura Knudsen, Community Involvement Coordinator, 206-553-1838, knudsen.laura@epa.gov

Site documents and additional information are available at:

- **EPA's website: epa.gov/superfund/portland-harbor**
- **Multnomah County Central Library, 801 SW 10th Ave., Portland**
- **St. Johns Library, 7510 N Charleston Ave., Portland**
- **Kenton Library, 8226 N Denver Ave., Portland**